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Training System for Use with LMS for Harper & Row  
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## ABSTRACT

A description of revisions made to the Learning Mastery System (LMS) grade-one training system in order to accommodate user training for the Harper & Row grade-two reading program is presented in this document. A summary of the procedures, instrumentation, and results of the evaluation of the training system is also included. The LMS is a set of materials and procedures prepared by the Southwest Regional Laboratory (SWRL) as an objectives-based framework to assist in managing the learning activities of existing reading programs and materials. (Author/RB)

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## SOUTHWEST REGIONAL LABORATORY TECHNICAL NOTE

DATE August 18, 1971

NO TN 5-71-65

TITLE: MODIFICATION OF LMS GRADE 1 TRAINING SYSTEM FOR USE WITH LMS  
FOR HARPER & ROW GRADE 2

ARTHORS: Cheryl McDonald and John Hylton

### ABSTRACT

This document presents a description of revisions made to LMS grade 1 training system in order to accommodate user training for LMS Harper & Row 2. A summary of the procedures, instrumentation, and results of the evaluation of the training system is also included.

MODIFICATION OF LMS GRADE 1 TRAINING SYSTEM  
FOR USE WITH LMS FOR HARPER & ROW GRADE 2

INTRODUCTION

The Learning Mastery System (LMS), developed by the Southwest Regional Laboratory, is a set of materials and procedures which supplement existing reading programs. LMS provides an instructional management framework by specifying learning outcomes taught in the reading program, and supplying materials for assessment and outcome-specific practice.

A prototype training system was developed for users of LMS to accompany Harper & Row and MacMillan Bank Street first grade reading programs during 1970-71 (see TN 5-71-63). Data gathered during the 1970-71 Exclusive Use Agreement tryout of LMS provided some useful information for analyzing the system's effectiveness related to Trainer Training Objectives (TN 5-71-64). However, little information was obtained in these tryouts related to the system's effectiveness in accomplishing Teacher Training Objectives.

A tryout conducted by the Product Development Division beginning in January 1971, of the LMS to accompany the Harper & Row grade 2 reading program, presented an opportunity to answer two additional questions regarding training for LMS.

1. Is the training system as developed for LMS 1, adaptable to the requirements of LMS 2 (i.e., by making minor revisions to the grade 1 training system, would it function as a grade 2 training system)?
2. Is a training system of this structure effective in meeting its objectives for teachers?

### Revision Requirements

An analysis of materials and procedures between LMS for Harper & Row 1 and 2 revealed the following program differences requiring consideration in modifying the grade 1 LMS Training System:

1. Difference in one Auxiliary Outcome.
2. LMS 2 included a Placement Test and Review Exercises (Words and Word Elements).
3. No Criterion Exercises Training Lesson for LMS 2.
4. The Criterion Exercise for LMS 2 was individually administered, and required only constructed responses.
5. Criterion Exercise scores were immediately recorded on the Class Record Sheet for LMS 2.
6. All materials use procedures for LMS 2 were grouped together in the LMS 2 Teacher's Manual.

The analysis of program differences indicated the feasibility of maintaining the overall structure of the prototype training system; only minor revisions were required within components of the LMS 1 training system to accommodate users of LMS 2. Specific revisions required within each of the training components can be seen in Appendix A.

### EVALUATION

The revised LMS Teacher Training System was evaluated at a single suburban school on January 26, 1971. Eight teachers and five observers from participating schools were present at the training session conducted by SWRL staff. An agenda of the session is given below.

LMS 2 TEACHER TRAINING AGENDA  
January, 1971

<u>Event Description</u>	<u>Event Time</u>
Welcome and Introduction	10 minutes
<u>Learning Mastery System</u> (slide-tape)	10 minutes
<u>Manual and Materials</u> (tape).	10 minutes
<u>Exercise: Scoring, Recording, and Assigning Additional Practice</u>	15 minutes
<u>Question-Answer Sheet</u>	5 minutes
Evaluation	20 minutes
Discussion and Questions	30 minutes
Briefing on Tryout Requirements, Schedule, and Materials Distribution	15 minutes

Information collected for evaluation purposes consisted of the following:

1. Trainee responses to objective items sampling from program information and materials use.
2. Trainee reactions and suggestions obtained by open-ended questions.
3. A transcription of trainee questions and comments.
4. SWRL staff comments.

A copy of the instrument used to collect the information for items 1 and 2 above is given as Appendix B.

### RESULTS

The information collected from 10 trainees attending the session is summarized briefly below under the categories of Program Information, Teacher Reactions, and Suggestions.

### Program Information

The median score out of nine possible information items was eight. Only three respondents, however, correctly answered all nine items. The question with the highest error rate required the trainees to match the name of specific program materials with a description of their use. Four respondents incorrectly matched all of the materials referenced. The remaining incorrect responses were evenly distributed across the other items.

### Teacher Reactions

Teacher reactions and suggestions elicited by the evaluation form were very helpful in that they were in general agreement with one another (Appendix C). Major points summarized from the teacher reactions are as follows:

1. Seven out of ten trainees felt that the training was too compressed for the amount of information presented and the unfamiliarity of the terms.
2. Eight of the trainees indicated that with the training received and after reviewing the manual and materials, they would feel confident in using LMS in their classroom.
3. Eight comments stated the desirability of including a filmstrip demonstration of classroom use of LMS as a supplement to the manual and materials tape.
4. The exercise in Scoring, Recording, and Assigning Additional Practice was considered to be a useful teaching tool.

## CONCLUSIONS

The training system as developed for LMS 1 proved to be easily adaptable to the requirements of LMS 2. The differences across the two grade levels of LMS were sufficiently minor to require minimal changes in the training system as it existed.

Teacher responses to the evaluation form and post-training critique suggested areas in the training materials requiring revision. Since the structure of the training system (objectives, component format, etc.) was greatly similar to that of LMS for grade level 1, the suggested revisions are viewed as relevant to both systems.

Recommendations based on the results are as follows:

1. The addition of a filmstrip or live demonstration of materials and procedures in context.
2. Prepare new specifications for Manual and Materials audio-tape/sample pack in an attempt to reduce the complexities brought about by the concurrent introduction of materials format, function, and use procedures. This might be accomplished by reducing the number of items included, reducing the level of detail, increasing the amount of time, or some combination of the above.
3. The possibility of a combined training system, incorporating all three versions of LMS, becomes a plausible next step. As with the modification of the basic system for the requirements of LMS 2, an analysis of the materials and procedures across programs could yield the basis of an inclusive training system without affecting subsequent classroom use of any version. While the advantages and disadvantages of a combined system have yet to be explored, it would provide a logical alternative to the continued development of program-specific training systems.

## APPENDIX A

### REVISION SPECIFICATIONS TO LMS 1 TO ACCOMMODATE LMS 2

#### LMS Overview: (filmstrip-tape)

##### Objectives:

The trainee will demonstrate his knowledge of the characteristics of LMS by:

1. Stating that the three elements of a Learning Mastery System are:
  - a. specified outcomes
  - b. assessment
  - c. supplemental instruction based on assessment.
2. Differentiating between the traditional use of assessment and that emphasized by LMS (assessment as opposed to diagnosis).
3. Stating that LMS is supplemental to the Harper & Row program.
4. State why frequent assessment is important.

This component was presented in slide tape format for the January tryout. The following revisions were made:

#### Frame Number

#### Change To

6

Audio: LMS may be built directly into an instructional program during its development; or it may be developed to supplement and increase the effectiveness of already existing instructional materials. The LMS versions being made available by the Southwest Regional Laboratory have been prepared to accompany the Harper & Row and MacMillan Bank Street grade 1 Reading Programs, and the Harper & Row grade 2 Reading Program.

7

Visual: Teacher at desk with materials.



<u>Frame Number</u>	<u>Change To</u>
9	Visual: Sketch of LMS 2 Criterion Exercise.
11	Visual: Teacher and child with Practice Exercise.
12	Three New Visuals: 1) Teacher's Manual - specific outcomes and procedures. 2) Criterion Exercise - assessment. 3) Practice Exercise - supplemental practice.
20	Audio: Placement Tests have been prepared by SWRL which cover the Readiness Skills for Bank Street grade 1 and Harper & Row grade 2 Reading Programs. Review Exercises are provided by SWRL for those pupils not obtaining a mastery score on Harper & Row grade 2 Placement Test.

Manual and Materials: (audio-tape and sample materials)

Objectives:

The trainees will demonstrate their knowledge of LMS materials and procedures by:

1. Stating the purpose of the:
  - a. Review Exercise
  - b. Criterion Exercise
  - c. Auxiliary Exercise
  - d. Practice Exercise
2. Sequentially listing the activities comprising the unit instructional sequence as stated in the Teacher's Manual.
3. Stating that there are specific Practice Exercises for Outcomes 1-3 only.
4. Stating that Criterion Exercises are individually administered.
5. Stating that Auxiliary Exercises are group administered.

This component was retaped entirely. The following program materials and procedures were reviewed within:

Materials

1. Teacher's Manual
2. Placement Test
3. Placement Test Record Form
4. Review Exercises
5. Criterion Exercise
6. Class Record Sheet
7. Practice Exercise
8. Auxiliary Exercise

Procedures

1. Placement and Review
2. Sounding Out and Reading Word Attack Words
3. Scoring and Recording Criterion Exercises
4. Administering Auxiliary Exercises
5. Assigning and Administering Practice Exercises

Additional References

1. Harper & Row Reading Outcomes
2. LMS Unit Guide  
Outcomes  
Assessment  
Remediation
3. Pacing Information
4. Unit Instructional Sequence

Scoring, Recording, and Assigning Additional Practice: (paper-pencil Exercise)

Objectives:

The trainee will be able to correctly:

1. Administer a Criterion Exercise.
2. Record the scores on the Class Record Sheet.
3. Assign appropriate Practice Exercises based on Criterion Exercise Performance.

This component was presented as a simulation exercise. The following adjustments were made:

1. "Attached is a sample Criterion Exercise and Class Record Sheet for Unit 1. Incorrect responses have been circled. Using the information beginning on page 18 in the Teacher's Manual, score the Criterion Exercise, fill in the appropriate information on the Class Record Sheet, and answer the remaining questions."
2. One question will be added - "What would you prescribe for additional practice?"
3. An LMS 2, Unit 1 Criterion Exercise will be marked to indicate incorrect responses.

Question-Answer Sheet (self-evaluation form with answers)

Objective:

The trainee will be able to answer specific questions concerning  
LMS characteristics, materials, and procedures.

This component was presented as a self-evaluation form with answers  
to which teachers could refer.

1. Question 3 deleted.
2. All references to Bank Street deleted.
3. Question 5 changed to "A Placement Test has been prepared for  
Harper & Row 2 Word Review Exercises and Word Element Review  
Exercises are provided for pupils scoring low on the Placement  
Test."
4. Question 14 deleted.

LEARNING MASTERY SYSTEM  
HARPER & ROW Grade 2  
EVALUATION FORM

1. In the blanks by each of the lettered materials below, write the number of the function which that material serves.

- \_\_\_\_\_ a. Review Exercises
- \_\_\_\_\_ b. Criterion Exercises
- \_\_\_\_\_ c. Auxiliary Exercises
- \_\_\_\_\_ d. Practice Exercises

- 1. Provides review after placement test for those pupils not demonstrating proficiency.
- 2. Provide Additional Practice. Used each unit with those pupils not demonstrating proficiency.
- 3. Used each unit to assess outcomes 1-3.
- 4. Used to assess outcomes 4-7. Use is optional.

2. Circle the letter of the LMS function below which is in your opinion most important.

- a. lists the learning outcomes
- b. provides for frequent assessment
- c. provides for assessment-based remediation
- d. all of the above

3. The major purpose of LMS assessment is to:

- a. help you assign grades.
- b. pinpoint pupil deficiencies
- c. motivate pupils
- d. see how well you've done

4. Please list the three things you will do for each LMS unit.

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5. Practice Exercises are provided for which of the following LMS outcomes?

a. 1 - 3

b. 4 - 7

c. 1 - 7

d. 1, 3, 5

6. Has the training program been clear? ( , please explain)

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7. With the training you've received and after reviewing the manual and materials, do you feel confident that you can use LMS in your classroom? (If no, please explain)

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8. What changes do you suggest to improve the following parts of the training program?

LMS Slide-tape

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Manual and Materials tape

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Exercise: Scoring, Recording, and Assigning Additional Practice

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9. What additional changes do you think would improve the training program?

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10. What is your major concern, if any, about using LMS in your classroom?

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## APPENDIX C

### TEACHER RESPONSES

HAS THE TRAINING PROGRAM BEEN CLEAR? (IF NOT, PLEASE EXPLAIN)

"Yes. As clear as possible considering the amount of information and short time."

"Yes." (2)\*

"The terms of all the exercises are confusing at first and now seem a bit vague. I would like to see on coordinated slides and tape, the process of grading and recording and then do it myself as we have done today."

"Actually, no. Maybe when I have time to study and use it I'll be able to understand it."

"Too hurriedly gone over to make all aspects clear."

"No. I do not feel that I was given enough time to understand it. I think involved teachers should be given the manual prior to in-service."

"The terms used are unfamiliar."

"No. Too fast. All terms new to us. Too many items. Too confusing. No explanation of practice materials."

"It has been too compressed. The focus has shifted a bit too rapidly."

WITH THE TRAINING YOU HAVE RECEIVED AND AFTER REVIEWING THE MANUAL AND MATERIALS, DO YOU FEEL CONFIDENT THAT YOU CAN USE LMS IN YOUR CLASSROOM? (IF NOT, PLEASE EXPLAIN)

"Yes." (2)\*

"I have not learned this new material well enough. I would have to study the manual well before proceeding."

"I'll try. Eventually I'm sure it will be rewarding."

"Yes. Particularly after reviewing the manual."

"Yes, with more time to study the manual and materials provided."

"If I have time and can substitute LMS for something I am now using i.e., Harper & Row phonics books or worksheets."

\*Numbers in parenthesis indicate frequency

"Not until I've had time to read the manual carefully - with no pressure of time, etc."

"Yes, after reviewing the manual at my leisure (when I'm not worried about getting dinner AND attending another meeting tonight from 7-10!)"

"Yes - with time for further review of the manual. Otherwise, no."

# WHAT CHANGES DO YOU SUGGEST TO IMPROVE THE FOLLOWING PARTS OF THE TRAINING PROGRAM?

## LMS SLIDE-TAPE

"Keep overview, but follow with demonstration."

"Show grading on slides. Otherwise seemed very clear."

"Visual aids of a lesson being taught or using one of the exercises."

"No suggestions."

"Show after teachers have reviewed materials."

"Acceptable."

## MANUAL AND MATERIALS TAPE

"It probably is necessary, but at 3:00 it was a little confusing to follow page numbers vs. exercise numbers!"

(One teacher had crossed it out)

"No suggestions except to correct mistake on 18."

"Give first. Allow time to read."

"Would like to divide this into at least two parts."

## EXERCISE: SCORING, RECORDING, AND ASSIGNING ADDITIONAL PRACTICE

"This was very good. Doing this helped clarify the steps."

"Then have exercise for teachers." (Following slide-tape demonstration.)

"We needed group effort to figure out what to do. It wasn't immediately obvious."

"I am wondering if some children might memorize the test and so render it ineffective."



"Good. Helped clarify the procedure for me."

"SHOW - don't ask."

"All (three) introduced without some kind of prior knowledge and at too fast a rate."

WHAT ADDITIONAL CHANGES DO YOU THINK WOULD IMPROVE THIS TRAINING SESSION?

"Hard to say now."

"The film - showing an actual situation of teaching and testing."

"I can tell better when I've done it for some time."

"After school is not the best time but also you must take into account we were not prepared for an active-participant type in-service. Most in-services are more of the informational types which do not require interaction on the part of the teacher. This was rather a surprise I think to all of us, thus maybe your information presentation was fine but we were not given prior notice of what you wanted from us."

"Don't have it after school!"

"Have a tape showing a teacher doing these steps with a group. Have more time - and present less materials."

"Add visual to the materials tape selection."

WHAT IS YOUR MAJOR CONCERN, IF ANY, ABOUT USING LMS IN YOUR CLASSROOM?

"Getting myself oriented quickly enough to avoid confusing my class."

"Present materials only appropriate for 35-45% of class."

"I think it might be confusing in a room which consists of very bright children, also very, very slow children, with only a few reading 'All Through the Year'".

"Won't know until I use it. Too unfamiliar with the material as yet."

"Time for tests and practice." (2)\*

"Each of my reading groups is using a different series."

\*Numbers in parenthesis indicate frequency

"Will it help? Also - words are seldom used in isolation, so why practice and test this way? How about the other methods of 'word attack'?"

CIRCLE THE LETTER OF THE LMS FUNCTION BELOW WHICH IS, IN YOUR OPINION MOST IMPORTANT.

- A. LISTS LEARNING OUTCOMES
- B. PROVIDES FOR FREQUENT ASSESSMENT (2)\*
- C. PROVIDES FOR ASSESSMENT-BASED REMEDIATION (1)\*
- D. ALL OF THE ABOVE (6)\*

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\*Numbers in parentheses indicate frequency

## APPENDIX D

### Teacher Questions

If her score says she needs these Practice Exercises (Word Elements), do we give one and then test again, or what?

How is the total score interpreted?

How much time does it take to put one child through a Criterion Exercise?

How do we use the Review Exercise?

Is this strictly phonics?

Don't you use comprehension or anything we might use our worksheets for?

### Observer Comments

#### Introduction

Thin lines on question frames are very hard to read from a distance.

#### Manual and Materials Tape

Make a note on the Trainer's Guide that he should hold up materials and pages as they are referenced.

The reference to page 20 and the Unit Remediation section should have pauses or be deleted to avoid confusion, which was extreme.

Note, before beginning quick review, teachers don't have to use their materials.